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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/963,324

09/26/2001

Lee R. Dishert

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EXAMINER

SKED, MATTHEW J

ART UNIT

PAPER NUMBER

2655

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DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/963,324

Applicant(s)

DISHERT, LEE R.

Examiner

Matthew J Sked

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/26/01.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 14 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Specification fails to mention or describe the memory containing "a further plurality of look-up tables".

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 14 and 15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what the applicant means by "a further plurality of look-up tables".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3 and 17 are rejected under 35 U.S.C. 102(a) as being anticipated by Jouet et al. (U.S. Pat. Pub. 2001/0012998).

Regarding claim 1, Jouet teaches a remote control system for translating an utterance of an operator to a control parameter of an electronic device comprising:

a remote control unit (Fig. 1, element 1), including,

- i. an audio input for receiving the utterance (microphone, paragraph 30);
and
- ii. a transmitter operably linked to the audio input for providing a transmission signal corresponding to the utterance (processed user's voice signals and transmits them, paragraph 32);

a relay station responsive to the transmission, the relay station including,

- i. a receiver for recovering audio signals representing the utterance from the transmission signal (television receiver, paragraph 36);
- ii. a speech recognition module for translating the audio signals into a sequence of words (paragraphs 37 and 38); and
- iii. a memory for translating the sequence of words into the control parameter which is then provided to the electronic device (contains a memory, Fig. 1,

element 31, and also states that the onscreen display is controllable by the microprocessor that receives the speech word commands, therefore these word sequences must be converted into signals the onscreen display can understand, paragraph 41).

7. As per claim 3, Jouet teaches the electronic device is operable linked to the relay station to receive the control parameter (OSD connected to microprocessor, Fig. 1).

8. As per claim 17, Jouet teaches a method of translating an utterance of an operator to a control parameter of an electronic device, comprising:

converting an utterance into a modulated transmission signal (modulation circuit processes user's voice signals, paragraph 32);

receiving the transmission signal at a relay unit (transmission receiver, paragraph 36);

recovering audio signals representing the utterance from the modulated transmission signal (decoder translates digital signals into acoustic symbols, paragraph 37);

processing the audio signals to recognize the words included in the utterance (linguistic decoder, paragraph 38); and

translating the recognized words into the control parameter, which is provided to the electronic device (the onscreen display is controllable by the microprocessor that receives the speech word commands, therefore these word sequences must be converted into signals the onscreen display can understand, paragraph 41).

9. Claims 1, 3-6, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Mingot et al. (U.S. Pat. 6,762,692).

Regarding claim 1, Mingot teaches a remote control system for translating an utterance of an operator to a control parameter of an electronic device comprising:

a remote control unit (Fig. 1, element 10), including,

- i. an audio input for receiving the utterance (col. 3, lines 16-18); and
- ii. a transmitter operably linked to the audio input for providing a transmission signal corresponding to the utterance (col. 3, lines 18-22);

a relay station responsive to the transmission signal, the relay station including,

- i. a receiver for recovering audio signals representing the utterance from the transmission signal (high frequency receiver, col. 3, lines 40-42);
- ii. a speech recognition module for translating the audio signals into a sequence of words (processed by the voice recognition circuit, col. 4, lines 4-11); and
- iii. a memory for translating the sequence of words into the control parameter which is provided to the electronic device (transform into a command which will be executed by the circuits, col. 4, lines 4-11).

10. As per claim 3, Mingot teaches the electronic device is operable linked to the relay station to receive the control parameter (OSD connected to microprocessor, col. 3, lines 60-65).

11. As per claim 4, Mingot teaches:

a display device, coupled to the electronic device for displaying a control menu (OSD displays help window, col. 3, lines 65-67 and col. 4, lines 1-3); and

wherein the utterance is translated by the relay unit into a menu navigation control parameter that causes the electronic device to navigate the displayed control menu (transform into a command which will be executed by the circuits, col. 4, lines 4-11 and navigates menu with voice commands, col. 4, lines 46-53).

12. As per claim 5, Mingot teaches the navigation of the menu is displayed on the display device in response to the electronic device receiving menu navigation control parameter (moving up and down within the menu on the screen, col. 4, lines 46-53).

13. As per claim 6, Mingot teaches the received navigation control parameter is displayed on the display device (user utters "zoom" and the corresponding window with a header of "Zoom" is displayed on the screen, col. 4, lines 53-58).

14. As per claim 17, Mingot teaches a method of translating an utterance of an operator to a control parameter of an electronic device, comprising:

converting an utterance into a modulated transmission signal (coding circuit, col. 3, lines 11-15);

receiving the transmission signal at a relay unit (high frequency receiver, col. 3, lines 40-42);

recovering audio signals representing the utterance from the modulated transmission signal (signal must be decoded prior to processing by the voice recognition circuit, col. 4, lines 4-11);

processing the audio signals to recognize the words included in the utterance (processed by the voice recognition circuit, col. 4, lines 4-11); and

translating the recognized words into the control parameter, which is provided to the electronic device (transform into a command which will be executed by the circuits, col. 4, lines 4-11).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mingot in view of Douglas (U.S. Pat. 5,335,313).

As per claim 2, Mingot does not teach the remote control unit is an operator headset having a microphone coupled to the audio input of the remote control.

Douglas teaches a multi-function voice controlled hospital bed where the remote control unit is a headset with a microphone (col. 6, lines 15-20).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot so that the remote control unit is a headset as taught by Douglas because it would allow a person with a disability control the system without having to hold the remote control unit.

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17. Regarding claim 7, Mingot does not teach the relay station containing a transmitter for providing the control parameter to a remote control input port of the electronic device.

Douglas teaches that the relay station communicates with the TV (Fig. 1) and suggests that this connection can be made through infrared and radio frequency transmission (col. 16, lines 39-47).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot to have the relay station contain a transmitter for providing the control parameter to a remote control input port of the electronic device as suggested by Douglas because it would allow the relay station to be located separately from the electronic device, hence saving memory on the electronic device.

18. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mingot in view of Douglas and taken in further view of Kuhn et al. (U.S. Pat. 6,553,345).

As per claim 8, neither Mingot nor Douglas teaches the remote control unit having a receiver for receiving transmissions from the relay station.

Kuhn teaches a speech-controlled remote control unit that communicates with the electronic device through a bidirectional data communication link, hence the remote control unit would inherently have a receiver (col. 2, lines 44-46).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot and Douglas to incorporate a receiver in the remote control unit as taught by Kuhn because it would allow the relay unit to

communicate with the user through the remote control hence allowing any error notifications to be made to the user.

19. As per claim 9, neither Mingot nor Douglas teaches the remote control unit is configured to receive menu data from the transmitter of the relay unit and the transmitter of the remote control unit is configured to provide transmission signals representing utterances for selecting a menu option.

Kuhn teaches the bi-directional link between the remote control and the television be used to display on screen prompts and navigate through them (col. 2, lines 66-67 and col. 3, lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot and Douglas to have the remote control unit configured to receive menu data from the transmitter of the relay unit and have the transmitter of the remote control unit configured to provide transmission signals representing utterances for selecting a menu option as taught by Kuhn because as Kuhn teaches, it would allow the information to be displayed on a display screen on the remote control hence allowing the menu on the television to be suppressed so that the user may make menu selections without disrupting watching a program on the television (col. 2, lines 66-67 and col. 3, lines 1-8).

20. As per claim 10, Mingot does not teach the relay unit further comprising a communication transceiver configured to allow a user to contact a remotely located party, wherein the receiver and transmitter of the remote control unit are configured to receive signals from the communications transceiver and to provide signals to the

communications transceiver to utilize the communication transceiver of the relay unit to communicate with the remotely located party.

Douglas teaches a telephone connected to the control card, which enables a user to contact and communicate with a remotely located party (col. 7, lines 56-65).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot to incorporate a communication transceiver in the relay unit to contact and communicate with a remotely located party as taught by Douglas because it would facilitate telephone use for the disabled by allowing this functionality to be performed on the remote control unit.

Neither Mingot nor Douglas teaches the connection between the relay unit and the remotely located party to be wireless.

However, the Examiner takes Official Notice that wireless communication is a well-known technique in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot and Douglas to connect the relay unit and remotely located party wirelessly because it would allow the system to operate without installing land lines that would be more costly.

21. As per claim 11, Mingot does not teach the remote control unit and the relay unit are configured to provide voice communication between the remotely located party and the operator.

Douglas teaches a telephone connected to the control card, which enables a user to contact and communicate through voice with a remotely located party (col. 7, lines 56-65).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot such that the remote control unit and the relay unit are configured to provide voice communication between the remotely located party and the operator as taught by Douglas because the system already has audio processing capability and this will allow the user to easily carry on a conversation with a remote party.

22. As per claim 12, Mingot does not teach the relay unit is operably linked to a telecommunication line and signals corresponding to the voice communication are transferred between the relay unit and the remotely located party over the communication line.

Douglas teaches the control card connected to a standard telephone, hence this telephone would be connected to a transmission line (col. 7, lines 56-65).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot to have the relay unit linked to a telecommunication line for voice communication as taught by Douglas because it would enable the system to be connected to a regular phone line hence allowing easy connection with existing phone lines.

23. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mingot in view of Arling et al. (U.S. Pat. 6,629,077) and taken in further view of Douglas.

Regarding claim 13, Mingot teaches a remote control system for translating utterances of an operator to a control parameters of an electronic device comprising:

a remote control unit (Fig. 1, element 10), including,

- i. an audio input for receiving the utterance (col. 3, lines 16-18); and
 - ii. a transmitter operably linked to the audio input to provide transmission signals corresponding to the utterances (col. 3, lines 18-22);
- a relay station responsive to the transmission signals, the relay station including,
- i. a receiver which recovers audio signals representing the utterance from the transmission signals (high frequency receiver, col. 3, lines 40-42);
 - ii. a speech recognition module which translates the audio signals into words (processed by the voice recognition circuit, col. 4, lines 4-11); and
 - iii. a memory for translating the words into the control parameters (transform into a command which will be executed by the circuits, col. 4, lines 4-11).

Mingot does not teach a plurality of electronic devices with a memory that contains a plurality of look-up tables as well as a processor to select one of the look-up tables.

Arling teaches a voice control remote control comprising:

a plurality of electronic devices (col. 4, lines 19-25);

a memory including a plurality of look-up tables each of which translates the translated words into the control parameters for a respective one of the plurality of devices (operational command code library has plurality of codes, col. 3, lines 42-50);

and

a processor which selects one of the look-up tables to be used to generate the control parameters responsive to the translated words (user enters data that serves to

identify the electronic device so to transmit the codes in the appropriate format, col. 3, lines 59-65).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot to have the remote controller control a plurality of devices including a memory with a plurality of look-up tables each corresponding to an electronic device and a processor to choose between them as taught by Arling because it would give the remote more functionality hence facilitating the control of multiple electronic devices for the user.

Neither Mingot nor Arling teach a transmitter which provides the control parameters from the selected look-up table to the respective electronic device.

Douglas teaches that the relay station communicates with the TV (Fig. 1) and suggests that this connection can be made through infrared and radio frequency transmission (col. 16, lines 39-47).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot and Arling to transmit the control parameters from the selected look-up table to the respective electronic device as suggested by Douglas because it would allow the relay station to be located separately from the electronic device, hence saving memory on the electronic device.

24. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mingot in view of Kuhn.

As per claim 16, Mingot teaches a remote control system for translating an utterance of an operator to a control parameter of an electronic device comprising:

a remote control unit (Fig. 1, element 10), including,

- i. a microphone for receiving the utterance (col. 3, lines 16-18);
- iii. a transmitter operably linked to the microphone for providing a transmission signal corresponding to the utterance (col. 3, lines 18-22);

a relay station responsive to the transmission signals, the relay station including,

- i. a receiver for recovering the utterance from the transmission signal and for receiving feedback signals from the electronic device (high frequency receiver, col. 3, lines 40-42);
- ii. a speech recognition module which translates the audio signals into words (processed by the voice recognition circuit, col. 4, lines 4-11); and
- iii. a memory for translating the words into the control parameters and providing them to the electronic device (transform into a command which will be executed by the circuits, col. 4, lines 4-11).

Mingot does not teach the remote control containing a receiver and the relay station to have a transmitter to feedback signals for providing prompts to the operator.

Kuhn teaches the remote control containing a receiver and relay station containing a transmitter (remote control unit that communicates with the electronic device through a bidirectional data communication link, hence the remote control unit would inherently have a receiver and the relay station would have a transmitter, col. 2, lines 44-46) and provides prompts to the operator (bi-directional link between the remote control and the television be used to display on screen prompts and navigate through them, col. 2, lines 66-67 and col. 3, lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot to have the remote control unit configured to have a receiver to receive menu data from the transmitter of the relay unit and have the transmitter of the remote control unit configured to provide transmission signals representing utterances for selecting a menu option as taught by Kuhn because as Kuhn teaches it would allow the information to be displayed on a display screen on the remote control hence allowing the menu on the television to be suppressed so that the user may make menu selections without disrupting watching a program on the television (col. 2, lines 66-67 and col. 3, lines 1-8).

Neither Mingot nor Kuhn teaches the remote control unit providing audio output.

However, the Examiner takes Official Notice that remote control units with an audio output are well known. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot and Kuhn to provide an audio output to the user through the remote control because it would allow the remote control unit to relay prompt to the operator without using a screen thereon, hence decreasing the size of the remote control unit.

25. Regarding claim 18, Mingot teaches a method of translating an utterance of an operator to a control parameter of an electronic device, comprising:

converting an utterance into a modulated transmission signal (coding circuit, col. 3, lines 11-15);

receiving the transmission signal at a relay unit (high frequency receiver, col. 3, lines 40-42);

recovering audio signals representing the utterance from the modulated transmission signal (signal must be decoded prior to processing by the voice recognition circuit, col. 4, lines 4-11);

processing the audio signals to recognize the words included in the utterance (processed by the voice recognition circuit, col. 4, lines 4-11);

translating the recognized words into the control parameter, which is provided to the electronic device (transform into a command which will be executed by the circuits, col. 4, lines 4-11);

receiving a feedback signal from the electronic device at the relay unit (Fig. 3 shows bidirectional data flow between the microprocessor the TV and OSD, thereby allowing for feedback); and

whereby the utterance menu prompts the operator of the remote control unit to select one of a plurality of menu options for the electronic device (menus have a plurality of options to choose from, Fig. 4).

Mingot does not teach receiving a feedback signal from the electronic device at the remote control unit in response to the control parameter for prompting the operator of the remote control system to select from a plurality of available control parameters.

Kuhn teaches:

designating an utterance menu command corresponding to the feedback signal (generates interactive prompts, col. 4, lines 43-49); and

transmitting a signal representing the utterance menu from the relay unit to the remote control unit (bidirectional link allows on-screen prompts to be sent to remote control unit, col. 2, lines 66-67 and col. 3, lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot to receive a feedback signal from the electronic device at the remote control unit in response to the control parameter for prompting the operator of the remote control system to select from a plurality of available control parameters as taught by Kuhn because it would allow for the prompts to be given from the remote control unit rather than the electronic device hence preventing the prompts from disrupting the operation of the electronic device.

Mingot does not teach providing the signal representing the utterance menu as an audio output signal.

Kuhn teaches providing the signal representing the utterance menu as an audio output signal (generates interactive prompts for synthesized speech, col. 4, lines 43-46).

Neither Mingot nor Kuhn teaches the remote control unit providing the audio output.

However, the Examiner takes Official Notice that remote control units with an audio output are well known. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Mingot and Kuhn to provide an audio output to the user through the remote control because it would allow the remote control unit to relay prompt to the operator without using a screen, hence decreasing the size of the remote control unit.

Conclusion


26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lemay et al. (U.S. Pat. Pub. 2002/0071577A1), Yet et al. (U.S. Pat. Pub. 2002/0072912A1), Korfin et al. (U.S. Pat. Pub. 2002/0095294A1), and Luchaup (U.S. Pat. 2002/0143555A1) teach speech controlled remote control units.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Sked whose telephone number is (703) 305-8663. The examiner can normally be reached on Mon-Fri (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Smits can be reached on (703) 306-3011. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MS
09/30/04



TALIVALDIS IVARS SMITS
PRIMARY EXAMINER